

Vulcan GeoModeller

Vulcan GeoModeller is ideal for creating geological, structural and grade/quality models for stratigraphic and non-stratigraphic applications. It can be used to perform face mapping in the field, geological modelling and to calculate preliminary resources.

Base Modules

Triangulation

- Create/edit 3D surface and solid triangulations
- Generate contours
- Register images with triangulations for better visualisation

Vulcan 3D CAD

- Design and digitise lines, polygons, points and text
- View, analyse, interactively edit 3D data

Data Transfer

- Import and export data between Vulcan and other applications
- ODBC connection to SQL Server™, Oracle® and MS Access™

Plotting

- Configure user-defined plot style sheets with title blocks and user prompts
- Edit and regenerate plot files
- Set up and generate single plots using a wizard-style interface
- Generate multiple plots with batch-style interface using existing data specs

Add these modules

- + Base Geostatistics
- + Gaussian Simulation
- + Channel Sampling
- + Geotech
- + Mine Design
[Open Pit Or Underground]
- + Drill & Blast Design
- + Grade Control
- + Unfolding

GeoModeller Modules

Grid Modelling

- Define surfaces as grid models
- Perform complex grid to grid operations
- Create stratigraphic, structural and grade/quality grid models using an automated modelling process
- Generate and analyse reserves by overlaying polygons onto grids to create reserve limits

Statistics

- Statistical analysis of Vulcan databases, grids and block models
- Automatically output results and charts in Microsoft® Excel®

Block Modelling

- Store and use information via regular cells or subcell variables
- Conduct inverse grade estimation
- Support large number of blocks - add, delete or modify variables in real time
- Create custom reports, including grade tonnage curves

Geology

- Manage and validate drillhole, geophysical, lithological and analytical data in Vulcan, or interface to third party databases
- 3D display/analysis of drillhole data
- Geological interpretation
- Compositing for non-stratigraphic and stratigraphic environments
- Multi-domain Implicit Modelling with no void or overlap between domains
- Model grade shell and geology domains
- Boolean modelling ensures valid triangulations for mine planning
- Calculate strip ratios from user-defined HARP block model variables, limiting a lowest mineable level

